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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/738,415	12/17/2003	Jorg Klosterhalfen	1238-16	8326

25881 7590 06/04/2007  
EPSTEIN DRANGEL BAZERMAN & JAMES, LLP  
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SUITE 820  
NEW YORK, NY 10165

EXAMINER
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ORTIZ, BELIX M

ART UNIT	PAPER NUMBER
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2164

MAIL DATE	DELIVERY MODE
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06/04/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/738,415	<b>Applicant(s)</b> KLOSTERHALFEN ET AL.	
	<b>Examiner</b> Belix M. Ortiz	<b>Art Unit</b> 2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Remarks*

1. In response to communications files on 23-April-2007, claims 11-13 are added and claims 1 and 5 are amended per applicant's request. Therefore, claims 1-13 are presently pending in the application.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-11 and 13 are rejected under 35 U.S.C. 103(a) (Eff. Filing date of foreign application 2/27/2003) as being unpatentable over Vos et al. (2002/0091672) (Eff. Filing date of application 11/21/2001) in view of Leymann et al. (U.S. patent 6,122,633) (Eff. Filing date of application: 4/20/1998) further in view of Leung et al. (U.S. patent 6,282, 570) (Eff. Filing date of application 12/7/1998).

As to claim 1, Vos et al. teaches a method for real time maintenance of database contents, in particular of files of a relational database (see paragraphs 5 and 68), in particular DB2, the method comprising the steps of:

determining a status of the contents of the database in real time using a database-integrated status monitor (see figure 6, character 604 and paragraphs 66, 68, and 95),

analyzing result of the status determination (see abstract and paragraph 10).

Vos et al. does not teach database-integrated status monitor.

Leymann et al. teaches subscription within workflow management systems (see abstract), in which he teaches database-integrated status monitor (see col. 3, lines 46-51 and col. 10, lines 17-19).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Vos et al. by the teaching of Leymann et al., because database-integrated status monitor, would enable the method because, "The technique proposed by the present invention minimizes the implementation effort for the subscription means as the teaching exploits and combines as far as possible various database features", (see column 3, lines 43-47).

Vos et al. does not teach comparing the analyzed results with comparison data; and activating maintenance functions directly following a positive compare result.

Leung et al. teaches monitoring a large parallel database through dynamic grouping and sequential sampling (see abstract), in which he teaches comparing the analyzed results with comparison data (see column 1, lines 45-50 and column 4, lines 7-8); and activating maintenance functions directly following a positive compare result (see column 2, lines 25-28).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Vos et al. by the teaching of Leung et al., because wherein comparing the analyzed results with comparison data; and activating maintenance functions directly following a positive compare result, would enable the method because, "Monitoring a

non-parallel database generally includes collecting performance statistics of a database. The performance statistics can be used to calculate a performance value for a non-parallel database, using, for example, a predefined formula”, (see column 1, lines 45-50).

As to claim 2, Vos et al. as modified teaches wherein the step of comparing the analyzed results comprises comparing the analyzed results with status threshold values, wherein said status threshold values represent data indicating an execution of the maintenance functions for the respective database contents (see Leung et al., column 1, lines 45-50).

As to claim 3, Vos et al. as modified teaches the method further comprising the step of adjusting said status threshold values for different database content groups of database content or different maintenance functions, respectively (see Leung et al., column 4, lines 8-11).

As to claim 4, Vos et al. as modified teaches the method further comprising the step of setting at least one rigid status threshold value; setting at least one soft status threshold value activating the maintenance function when the soft status threshold value is reached and further criteria apply; and activating the maintenance function immediately when the rigid status threshold value is reached (see Vos et al., paragraphs 52 and 74).

As to claim 5, Vos et al. as modified teaches wherein the database contents are in a system and further comprising the step of defining restrictions related to the system, time, data or

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application for the execution of maintenance functions in which an immediate execution of a maintenance function is suppressed at least temporarily (see Leung et al., column 4, lines 8-11).

As to claim 6, Vos et al. as modified teaches wherein the real time activation of the maintenance functions causes direct execution, transfer to a job scheduler, or a call of database utilities (see Vos et al., paragraphs 10-12).

As to claim 7, Vos et al. as modified teaches the method characterized in that the executed maintenance functions are logged and a maintenance log is produced (see Vos et al., paragraph 66).

As to claim 8, Vos et al. as modified teaches a device, set up to execute a method said device comprising:

a database unit in which the database is stored (see Vos et al., paragraph 5),  
said database unit comprising maintenance means for executing maintenance functions (see Vos et al., paragraph 9) ; and

monitoring means for monitoring and reading out data indicative of the determined status of the contents of the database content stored in said database unit (see Vos et al., abstract and paragraph 95),

a monitoring unit for monitoring said output data (see Vos et al., paragraph 95),  
wherein said monitoring unit comprises means for analyzing said data and for

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comparing said data with comparison data (see Leung et al., column 1, lines 45-50 and column 4, lines 7-8), and

output means for directly outputting instruction for the activation of said maintenance means for executing a maintenance utility (see Vos et al., paragraphs 9, 36, and 107).

As to claim 9, Vos et al as modified teaches a computer program with an implementation of a method for a computer (see Vos et al., figure 1 and paragraph 34).

As to claim 10, Vos et al. as modified teaches a computer program product with a computer program or with instructions for executing a method (see Vos et al., paragraph 36).

As to claim 11, Vos et al. has combined on claim 1, teaches a method for real time maintenance of database contents, in particular of files of a relational database (see paragraphs 5 and 68), in particular DB2, the method comprising the steps of:

determining a status of the contents of the database in real time using a database-integrated status monitor (see Vos et al. figure 6, character 604 and paragraphs 66, 68, and 95),

database-integrated status monitor (see Leymann et al col. 3, lines 46-51, and col. 10, lines 17-19);

analyzing result of the status determination (see Vos et al. abstract and paragraph 10);

comparing the analyzed results with said status threshold values (see Leung et al column 1, lines 45-50); and

activating maintenance functions directly following a positive compare result (see Leung et al column 2, lines 25-28).

Vos et al. does not teach adjusting status threshold values for different database content, groups of database content or different maintenance functions respectively.

Leung et al. teaches monitoring a large parallel database through dynamic grouping and sequential sampling (see abstract), in which he teaches adjusting status threshold values for different database content, groups of database content or different maintenance functions respectively (see column 4, lines 8-11).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Vos et al. by the teaching of Leung et al., because adjusting status threshold values for different database content, groups of database content or different maintenance functions respectively, would enable the method because, "The database server [202] contains a collection of databases [204]. The database monitor [206] collects the performance statistics based on instructions from the user", (see column 4, lines 7-11).

As to claim 13, Vos et al. has combined on claim 1, teaches a method for real time maintenance of database contents, in particular of files of a relational database (see paragraphs 5 and 68), in particular DB2, the method comprising the steps of:

determining a status of the contents of the database in real time using a database-integrated status monitor real time statics (see Vos et al. figure 6, character 604 and paragraphs 66, 68, and 95),



database-integrated status monitor (see Leymann et al col. 3, lines 46-51 and col. 10, lines 17-19);

analyzing result of the status determination (see Vos et al. abstract and paragraph 10);

comparing the analyzed results with comparison data (see Leung et al column 1, lines 45-50 and col. 4, lines 7-8).

Vos et al. does not teach activating at least one of the maintenance functions COPY, REORG or RUNSTATS directly following a positive compare result.

Leymann et al. teaches subscription within workflow management systems (see abstract), in which he teaches activating at least one of the maintenance functions COPY, REORG or RUNSTATS directly following a positive compare result (see column 10, lines 17-19).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Vos et al. by the teaching of Leymann et al., because activating at least one of the maintenance functions COPY, REORG or RUNSTATS directly following a positive compare result, would enable the method because, "A trigger defines a set of actions that are executed or triggered by, a 'delete', 'insert', or 'update' operation on a specified table stored within the database. When such an SQL operation is executed, the trigger is said to be activated", (see column 10, lines 17-20).

4. Claims 12 is rejected under 35 U.S.C. 103(a) (Eff. Filing date of foreign application 2/27/2003) as being unpatentable over Vos et al. (2002/0091672) (Eff. Filing date of application 11/21/2001) in view of Leymann et al. (U.S. patent 6,122,633) (Eff. Filing data of application: 4/20/1998).

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As to claim 12, Vos et al. has combined on claim 1, teaches a method for real time maintenance of database contents, in particular of files of a relational database (see paragraphs 5 and 68), in particular DB2, the method comprising the steps of:

determining a status of the contents of the database in real time using a database-integrated status monitor (see Vos et al. figure 6, character 604 and paragraphs 66, 68, and 95),

database-integrated status monitor (see Leymann et al col. 3, lines 46-51 and col. 10, lines 17-19);

analyzing result of the status determination (see Vos et al. abstract and paragraph 10);

setting at least one rigid status threshold value; setting at least one soft status threshold value; activating a maintenance function when the soft status threshold value is reached and further criteria apply; and activating the maintenance function immediately when the rigid status threshold value is reached (see Vos et al. paragraphs 52 and 74).

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***Conclusion***

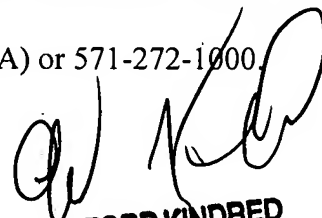
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Belix M. Ortiz whose telephone number is 571-272-4081. The examiner can normally be reached on moday-friday 9am-5pm.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

bmo

May 16, 2007

  
**ALFORD KINDRED**  
**PRIMARY EXAMINER**